TOWN OF WELLESLEY



MASSACHUSETTS

SUSTAINABLE ENERGY COMMITTEE

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SEC Project Updates

July 23, 2018

Green Communities

In late June, the Town received two payments of Green Communities grant funds totaling \$74,013. The Town recently received an email from the Department of Energy Resources (DOER) notifying us that DOER made the second payment of \$39,700 in error. However, the Town will be able to retain the full amount of \$74,013. On June 27, Marybeth Martello submitted a Green Communities progress report to DOER. The report contained the following summaries from Allen Hebert of the Facilities Management Department (FMD) and Doug Stewart of the Department of Public Works (DPW).

Light-Emitting Diode (LED) Retrofit Project on the Department of Public Works Campus

Wellesley's FMD has been preparing for the LED project by researching lights and fixtures and by writing the project manual, (to be completed by July 20). FMD has decided to use lights with temperatures of 2,700 and 3,000 Kelvin. As outlined in the table, below, FMD will order LEDs, invite bidders and hold a pre-bid meeting in late July. FMD will execute the contract and start the project in early August, with an expected completion date of August 31. No invoices have been received to date.

DPW LED Project Schedule			
#	Description	Estimated Completion Date	Days
1	Complete Project Manual	Friday, July 20, 2018	0
2	Order LEDs	Monday, July 23, 2018	3
3	Invite Bidders	Monday, July 23, 2018	0
4	Pre-Bid Meeting	Friday, July 27, 2018	4
5	Questions Due	Monday, July 30, 2018	3
6	Bids Due/Opened	Friday, August 03, 2018	4
7	Execute Contract/Issue NTP	Monday, August 06, 2018	3
8	Start Project	Monday, August 13, 2018	7
9	Complete Project	Friday, August 31, 2018	18
10			
Total Days			42

Energy Audit of Municipal Pump Stations and Water Treatment Plants

The Town of Wellesley has hired Wright-Pierce to audit the Town's major water and sewer pumps stations and wastewater treatment plants with the aim of identifying measures that could reduce energy use throughout the system.

- Field work was completed at the water and sewer pump stations and water treatment plants during the week of May 21, 2018.
- Wright-Pierce is currently preparing calculations for energy savings and pump efficiency.
- A number of energy conservation measures have been identified.
- Wright-Pierce is currently preparing a draft report with a summary of their findings and recommendations. Wright-pierce expects to submit this draft report in early August.
- Wright-Pierce has expended approximately \$17,700 or about half of the \$35,500 project fee, but has not submitted any project invoices to date.

On July 12, Laura attended an Energy Manager's meeting, organized by Neal Duffy, the SEC's Green Communities representative.

SEC Staffing Changes

We were happy to welcome Janet Mosley who began work on July 17. Janet has been busy completing paperwork, meeting people around Town Hall, reading Sustainable Energy Committee (SEC) documents like the Energy Reduction Plan and learning MassEnergyInsight.

Hardy, Hunnewell, Upham (HHU)

On June 28, the School Building Committee (SBC) selected SMMA as the architectural firm to carry out the Hunnewell School Feasibility Study. Their team includes an internal person who was recommended to us by Ellen Watts of Architerra and by Winchester's Energy Manager. The team also includes Bill Maclay as an outside advisor who wrote the definitive book on designing for zero net energy (ZNE) (see link). During the interviews, all three firms provided much valuable information on the art of the possible with regard to ZNE.

- The Jonathan Levi group has designed a 100% daylight school. Occupants rarely turn on the lights, even on cloudy days.
- The HMFH group has designed the Coolidge Corner School (aka Devotion School) in Brookline that they claim has the least BTUs per square foot of any school in Massachusetts, despite partial retention of the historical structure and the absence of triple pane windows.
- SMMA is proposing an elementary school design in Lincoln that they believe will be at or close to ZNE. Their financial case suggests that ZNE is the most economical option. SMMA believes that ZNE will help earn voter approval for the bond.

Additional activities regarding sustainable buildings include:

- June 20 Marybeth attended Massachusetts Climate Action Network (MCAN) Roundtable on ZNE
- June 22 Ellen Korpi, Tom Ulfelder and Marybeth met to discuss sustainable/ZNE buildings. Tom met with Joe McDonough of FMD on this topic, as well.
- July 5 Ellen and Marybeth met with Blythe Robinson to talk with her about what we have learned regarding ZNE buildings and to update her on various projects. Ellen put together a preliminary road map for a public education plan and she and Marybeth will be coordinating with Sustainable Wellesley.
- July 12 Laura, Tom, Jack Morgan, Lise Olney and Kevin Kennedy attended an MCAN ZNE Roundtable.
- Marybeth and Allen Hebert of FMD are planning to speak with ZNE officials in Towns who are pursuing ZNE, such as Cambridge, Amherst and Lexington.
- Marybeth has ordered a number of ZNE books through the library, and is seeking out data on construction and operating costs, as well as on building systems and equipment maintenance.

Home Energy Seminars for Seniors

Fred Bunger held a Home Energy Saving Seminar at the Tolles-Parsons Center on July 9. The next seminar will take place at Tolles-Parsons on August 3, 10:30-11:30am.

The seminar aims to increase participation in the home energy assessments offered by the Wellesley Municipal Light Plan (WMLP) and National Grid. Seminar participants are encouraged to bring their home energy bills so they can compare their costs against a range of costs for very efficient to very inefficient homes. To make it easy to sign up for the home energy assessments, volunteers who have previously experienced audits and home energy improvements will be available as mentors to help seniors with the process.

Massachusetts Comprehensive Energy Plan Meeting

On July 18, Marybeth attended a meeting about the Commonwealth's Comprehensive Energy Plan. Most of the meeting consisted of a presentation by Synapse, the consulting firm hired by the State to develop projections of future (2030) energy use in Massachusetts. Synapse reviewed both past trends and assumptions the firm is making with regard to adoption of air source heat pumps, square footage of residential housing and commercial buildings, vehicle miles traveled, energy supply (renewable, gas, oil...), etc.

SEC Website and Public Communication

Marybeth reorganized and made major additions to the <u>SEC Website</u>. She plans to add pages about past programs such as Power to Choose and solar installations at Houses of Faith. Aside from those pages, the website is fairly complete and the addition of new content will be quick and easy. On July 17, Marybeth met with Blythe Robinson to learn more about plans for town-wide public communication and the role of the new Communication's Director. Blythe would ideally like to see a Town Facebook page and a coordinated Town presence on social media. The Communication's Director will serve as a resource for Departments and Marybeth looks forward to working with and learning from that Director when they come on board. Town Hall is in the process of interviewing candidates.

Wellesley Municipal Light Plant

At its June 11 meeting, the WMLP Board:

- Elected Jack Stewart as chair for FY19, Katy Gibson as vice-chair and Jeff Wechsler as secretary.
- Accepted the final Phase I Study on Greenhouse Gas Emission Reductions from the Analysis Group and confirmed a September 24 public forum on the study.
- Approved the Director's objectives for FY19 which include 5 (of 13) on facets of greenhouse gas (GHG) reduction:
 - Electric Vehicle Charging Evaluate the technology that restricts electric vehicle charging to non-peak hours; calculate the cost-benefits of implementing a time-of-use rate and/or other financial incentives to promote the electrification of residential transportation vehicles.
 - Analysis Group Phase I Review the various options available to the MLP to reduce greenhouse gas emissions for the electricity sector (as identified in the Analysis Group Phase I report) with the ad hoc committee. Establish a priority implementation schedule and present to the Municipal Light Board for review, feedback and ultimately approval.
 - 900 Worcester Street Solar Finalize an agreement to lease roof space of sufficient size to accommodate a solar installation of approximately 900 kilowatts. Issue a request for proposals to enter into an agreement with a target installation price of \$2,200 per kilowatt, which requires a taxable third party to benefit from the federal Investment Tax Credit and accelerated depreciation.
 - Greenhouse Gas Reduction Consolidate the data contained within Energy New England's "Carbon Reduction" report and the Analysis Group 2018 – 2030 GHG Reduction Study into one analysis that compares the electricity sector's GHG reduction to the Town Meeting 25% target.
 - Analysis Group Phase II Work with Analysis Group in the completion of the 2031-2050 GHG reduction study. Coordinate communications and study circulation with the ad hoc committee and public.

A recent survey of Massachusetts MLPs showed that Wellesley ranks in the top 20% of the 35 respondents in the percentage of residential solar installations per household, with a penetration of 1.09 percent.

The Department of Energy Resources is coming close to finalizing the Solar Massachusetts Renewable Target (SMART) program to support solar development, with a request for comment on the final component on energy storage. Please click this link for more information on the SMART Program. Once the program is final, DOER will begin work on adapting SMART for MLP towns.